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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,105	07/26/2001	Dmitri Litvinov	SEAG 48091	8426
7590	12/01/2004		EXAMINER	
Alan G. Towner Pietragallo, Bosick & Gordon One Oxford Centre, 38th Floor Pittsburgh, PA 15219			SNIEZEK, ANDREW L	
			ART UNIT	PAPER NUMBER
			2651	

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/916,105

**Applicant(s)**

LITVINOV ET AL.

**Examiner**

Andrew L. Snizek

**Art Unit**

2651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 7, 10, 14-16 and 24-26 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 8, 9, 11-13 and 17-23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 14-16, 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka et al. US005995341A .

Re claim 1: Tanaka et al. teaches a perpendicular recording system including a perpendicular magnetic recording disk (abstract), a perpendicular recording head (30) including a write pole (511) that is moveable in an arc by actuator (15) and means to sequentially write with the pole in adjacent tracks to substantially eliminate a skew angle effect (see abstract, figure 13 along with corresponding disclosure and column 3, lines 52-54).

Re claims 14-16 and 24; The recording system as taught by Tanaka et al. includes a disk that includes at least three adjacent magnetic tracks (figure 13) and a perpendicular recording head (511) that has a trailing edge and a side edge with the side edge aligned at an angle that remains greater than or equal to zero degrees when writing to these tracks. Note the angle taught in column 9 is substantially 5 degrees when writing to these three adjacent tracks. Only when the head is moved a large number of track away would this angle have a large change in degrees away from 5

Art Unit: 2651

degrees. Small degree changes would occur about the three tracks should, which changes would be within the ranges set forth in claims 15-16.

Re claims 25-26; "Method claims 25-26 are drawn to the method of using the corresponding apparatus claimed in claims 1, 14. Therefore method claims 25-26 correspond to apparatus claims 1, 14 and are rejected for the same reasons of anticipation (obviousness) as used above."

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-3, 6-7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. in view of applicants admitted prior art as described with respect to figure 1.

The teaching of Tanaka et al. is discussed above and incorporated herein.

Claims 2-3, 6-7 and 10 additionally set forth directions of movement of the head during recording which although not specifically discussed in Tanaka are well known directions of movement for recording as taught by applicants admitted prior art (figure 1 which shows bi-directional movement during recording, along with corresponding disclosure). It would have been obvious to one of ordinary skill in the art at the time of the invention to include such movements used for recording in the arrangement as taught by Tanaka

Art Unit: 2651

et al. since by doing so allows for alternative recording techniques to be used, each providing a manner in which the disk can be recorded.

***Allowable Subject Matter***

5. Claims 4-5, 8-9, 11-13, 17-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: The claimed specific angle ranges for angles A1 and A2 as set forth in claims 4, 8, 17 and 19 when the head is at the inward and outward portions of the disk is neither taught by nor an obvious variation of the art of record. The claimed movement of the write pole to a zero skew angle location as set forth in claims 11-13 is neither taught by nor an obvious variation of the art of record. The claimed aspect ratio of the length of the side edge to the trailing edge of greater than 2:1 is neither taught by nor an obvious variation of the art of record.

***Response to Arguments***

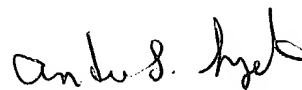
7. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L. Snizek whose telephone number is 703-308-1602. The examiner can normally be reached on Mon.-Fri..

Art Unit: 2651

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh N Tran can be reached on 703-305-4040. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Andrew L. Snizek  
Primary Examiner  
Art Unit 2651

A.L.S.  
11/27/04